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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,593	04/21/2006	Francesco Ferraiolo	5405.P0027US	4111
23474 7590 10/19/2009 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			EXAMINER BONK, TERESA	
			ART UNIT	PAPER NUMBER
			3725	
			MAIL DATE	DELIVERY MODE
			10/19/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/576,593	FERRAIOLO, FRANCESCO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Teresa M. Bonk	3725	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 36-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|--|--|

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 4, 2009 has been entered.

### ***Response to Arguments***

Applicant's arguments filed on August 4, 2009 have been considered but are moot in view of the new ground(s) of rejection.

### ***Sixth Paragraph of 35 USC § 112***

The following is a quotation of the sixth paragraph of 35 U.S.C. 112:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

With regards to claim 49, Applicant appears to be invoking 35 U.S.C. 112, sixth paragraph: "means for fixing." The Applicant's specification cites "means of known type for fixing" on page 7, paragraph 4 and "fixing means" on page 9, paragraph 1.

*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40, 41, and 44-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 40, there is insufficient antecedent basis for “said one wire.”

With regards to claim 44, there is insufficient antecedent basis for “said first wire,” “said second portions,” and “said second wire.”

With regards to claims 41 and 46, the following similar limitations are considered to be indefinite: (claim 41) “a second metal cable or wire extending in a direction transverse to said longitudinally-extending wires and being disposed longitudinally between two longitudinally-adjacent intertwining regions of each adjacent pair of said wires; (claim 46) “a metal cable or wire extending in a direction transverse to said array of longitudinally-extending wires and being disposed longitudinally between two longitudinally-adjacent intertwining regions of each adjacent pair of said wire” and (claim 45) “a metal cable or wire extending in a direction transverse to said longitudinally-extending wires and being disposed longitudinally between two longitudinally-adjacent intertwining regions of each adjacent pair of said wires.” These limitations require that the “cable or wire” *extend in a direction transverse* the longitudinally-extending wires and be *disposed longitudinally* - this is confusing since these are opposite directions. The Examiner interprets that if the traverse cable or wire also lies or is present

between the two longitudinally-adjacent intertwining regions of each adjacent pair of said wires that the limitation of “being disposed longitudinally” is met.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 46 is rejected under 35 U.S.C. 102(b) as being anticipated by Vancraeynest et al. (hereafter “Vancraeynest”) (US Patent 6,168,118), as best understood.**

Vancraeynest discloses a protective wire net comprising: an array of longitudinally-extending wires (2 and 3) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions defined by portions of the respective said wires which are twisted around one another, as seen in Figure 1; and a metal cable or wire (4) extending in a direction transverse to said array of longitudinally-extending wires and being disposed longitudinally between two longitudinally-adjacent intertwining regions of each adjacent pair of said wires, as seen in Figure 1, said metal cable or wire being intertwined with said wires as said metal cable or wire extends transversely across said array [Column 2, lines 50-65].

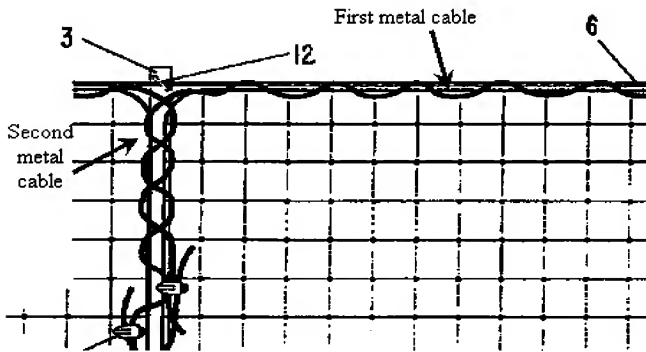
**Claims 46-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Thommen, Jr. (hereafter “Thommen”) (US Patent 5,524,875), as best understood.**

With regards to claim 46, Thommen discloses a protective wire net comprising: an array of longitudinally-extending wires (5) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions defined by portions of the respective said wires which are twisted around one another [Column 5, lines 10-15]; and a metal cable or wire (6) extending in a direction transverse to said array of longitudinally-extending wires and being disposed longitudinally between two longitudinally-adjacent intertwining regions of each adjacent pair of said wires, as seen in Figure 3, said metal cable or wire being intertwined with said wires as said metal cable or wire extends transversely across said array, as seen in Figure 3. It is considered to be inherent that Thommen's net including the wire rope 6, is made from metal since its purpose is to restrain falling rocks.

With regards to claim 48, Thommen discloses wherein said metal cable or wire is a first metal cable and said protective wire net further comprises a longitudinally-extending second metal cable having a portion around which one of said wires disposed adjacent said second metal cable is twisted, said first metal cable being a bent portion of said second metal cable [See attached Figure 3 on page 6 of this Office action].

With regards to claim 48, Thommen discloses wherein said metal cable or wire (6) has terminal ends and a ring-shaped anchor (8) is disposed on each said terminal end of said metal cable or wire, one of said wires extending through each said anchor (via loops 10), as seen in Figure 2.

With regards to claim 49, Thommen discloses further comprising means for fixing (8) said protective wire net to a slope, as seen in Figure 2 [Column 2, lines 53+].



*Figure 3 from Thommen US Patent 5,524,875*

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 36, 37, 39, 40-42, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riviere et al. (hereafter "Riviere") (US Patent 1,401,557) in view of Vancraeynest.**

With regards to claim 36, Riviere discloses a protective wire net comprising: an array of longitudinally-extending wires (24 and 25) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions (26) defined by portions of the respective said wires which are twisted around one another, as seen in

Figure 1; and a longitudinally-extending cable [reference sign 27 and Page 2, lines 30-33] having a portion around which one of said wires disposed adjacent said cable is twisted, said metal cable being interposed between two of said wires in said array, as seen in Figure 1.

With regards to claim 37, Riviere discloses further comprising a plurality of said longitudinally-extending cables arranged at regular intervals with one another across said array and in an alternating manner with one or more of said wires, as seen in Figure 1.

With regards to claim 39, Riviere discloses wherein said portions of the respective said wires which define said intertwining regions are doubly-twisted around one another, said array and said intertwining regions being disposed to define hexagonal shapes throughout said array such that said protective wire net comprises a double-twist net with hexagonal meshes [Figure 1 and Page 1, lines 40-45].

With regards to claim 40, Riviere discloses wherein said cable (27) is interposed between a first (one) wire and another of said wires disposed immediately adjacent said first wire, said cable having a plurality of said portions around which said first wire is twisted and said portions are first portions of said cable, said cable having a plurality of second portions around which said another wire is twisted, said first and second portions of said cable alternating with one another as said cable extends longitudinally along said array [See attached Figure 1 on page 8 of this Office action].

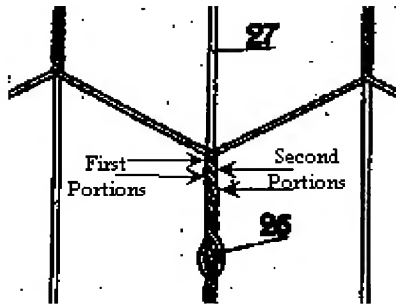
With regards to claim 42, Riviere discloses a protective wire net comprising: an array of longitudinally-extending wires (24 and 25) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions defined by portions of the respective said wires which are twisted around one another; and a longitudinally-



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extending cable (27) interposed between two of said wires in said array disposed adjacent one another, said cable having a first portion around which a first of said two wires is twisted and a second portion around which a second of said two wires is twisted [See attached Figure 1 on page 8 of this Office action].

With regards to claim 44, Riviere discloses wherein said metal cable has a plurality of said first portions around which said first wire is twisted and a plurality of said second portions around which said second wire is twisted, said first and second portions of said metal cable alternating with one another as said metal cable extends longitudinally along said array. [See attached Figure 1 on page 8 of this Office action].



*Figure 1 from Riviere US Patent 1,404,557*

Riviere discloses the invention substantially as claimed except for the cable being metal and a second metal cable or wire.

Vancraeynest is relied upon to teach an array of longitudinally-extending wires (2 and 3) and cables (4) made of steel wire [Column 2, lines 40-41]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Riviere's cable as a metal, such as steel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of mechanical efficiency.

With regards to claims 41 and 45, as best understood, Vancraeynest is also relied upon to teach a second metal cable or wire (4) extending in a direction transverse to said longitudinally-extending wires, as seen in Figure 1. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a second cable/wire, traverse to the longitudinally-extending wires, in Riviere's net in order to "absorb the tensile stresses caused by (objects caught or pushed into the net)" [Column 1, lines 30-35].

**Claims 36, 38, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaccheroni (US Patent 4,394,924) in view of Riviere.**

With regards to claim 36, Zaccheroni discloses a protective wire net comprising: an array of longitudinally-extending wires (15 and 16) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions (14) defined by portions of the respective said wires which are twisted around one another, as seen in Figure 3.

With regards to claim 42, Zaccheroni discloses a protective wire net comprising: an array of longitudinally-extending wires (15 and 16) arranged in side-by-side relation with one another, adjacent pairs of said wires being intertwined with one another at intertwining regions defined by portions of the respective said wires which are twisted around one another, as seen in Figure 3.

With regards to claims 38 and 43, Zaccheroni discloses comprising an additional longitudinally-extending metal wire (5) having a portion around which one of said wires disposed adjacent said additional metal cable is twisted, said additional metal cable defining a terminal longitudinally- extending edge of said protective wire net, as seen in Figure 3.

Zaccheroni discloses the invention substantially as claimed except for a longitudinally-extending cable interposed between two of said wires in said array disposed adjacent one another, said cable having a first portion around which a first of said two wires is twisted and a second portion around which a second of said two wires is twisted and wherein the additional metal wire is a cable.

Riviere is relied upon to teach discloses a protective wire net comprising: an array of longitudinally-extending wires (24 and 25) and a longitudinally-extending cable (27) interposed between two of said wires in said array disposed adjacent one another, said metal cable having a first portion around which a first of said two wires is twisted and a second portion around which a second of said two wires is twisted [See attached Figure 1 on page 8 of this Office action]. Riviere also teaches that wires used to the form the net “may also be...in the form of cable or the like” [page 2, lines 30-33]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a longitudinally-extending metal cable and for

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the additional wire to be a cable because use of a known technique improves similar devices in the same way that is, reinforcing the final netting product.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and further show the state of the art. US Patents 502,470; 507,865; 562,308.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571)272-1901. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on 571-272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teresa M. Bonk/  
Examiner, Art Unit 3725